## DAIMLER AG

EXECUTIVE ORDER U-R-016-0116-1 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2016	GMBXL10.6RJA	10.6	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Cooler, Exha	ic Direct Injection, Turbo Engine Control Module, ust Gas Recirculation, Se uction-Urea, Ammonia Ox	Oxidation Catalyst, elective Catalytic	Crane, Tractor, Dozer, Loader, Pump, Compressor, Generator			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER	STANDARD CATEGORY		NMHC N	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
130≤KW≤560			0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.03	0.23	-	0.7	0.02			

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

This Executive Order hereby supersedes Executive Order U-R-016-0116 dated December 24, 2015.

Executed at El Monte, California on this \_\_\_\_\_\_\_

\_ day of March 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

## ATTACHMENT 10F1

W-R-016-0116-1

## Engine Model Summary Template

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Engine Family	1. Engine Code	Engine Family 1. Engine Code 2. Engine Model 3. BHP@RPM 4. Fuel Rate:  (SAE Gross) mm/stroke@  (for diesel on	3. BHP@RPM (SAE Gross)	4. Fuel Rate:       5. Fuel Rate:       6.       7. Fuel Rate:       8. Fuel Rate:       9. Emission Control         mm/stroke@peak HP (lbs/hr)@peak HP (los/hr)@peak	S. Fuel Rate: 6. (lbs/hr)@peak HP Torque@RPM (for diesel only) (SAE Gross)	6. Torque@RPM (SAE Gross)	7. Fuel Rate: 8. Fuel Rate: (lbs/hr)@peak mm/stroke@torque	8. Fuel Rate: mm/stroke@peak torque	9. Emission Control Device per SAE J1930
GMBXL10.6RJA	GMBXL10.6RJA 470LA.E4-1	OM470LA	OM470LA 320KW@1700	253.0	63.4 Kg/hr	63.4 Kg/hr 2100Nm@1300	285.0	54.6 Kg/hr	DDI,TC, ECM, CAC, SCR, OC, EGR, AMOX
GMBXL10.6RJA	SMBXL10.6RJA 470LA.E4-2	OM470LA	OM470LA 300KW@1700	236.0	59.2 Kg/hr	59.2 Kg/hr 2000Nm@1300	271.0	51.9 Kg/hr	DDI,TC, ECM, CAC, SCR, OC, EGR, AMOX
GMBXL10.6RJA	GMBXL10.6RJA 470LA.E4-3	OM470LA	OM470LA 280KW@1700	219.0	55.0 Kg/hr	55.0 Kg/hr 1900Nm@1300	256.0	49.2 Kg/hr	DDI,TC, ECM, CAC, SCR, OC, EGR, AMOX